ABSTRACT OF THE DISCLOSURE

A system and method of balancing state of charge among plural series connected electrical energy storage unit is provided. Individual storage units are selectively coupled by semiconductor switches for monitoring and balancing state of charge. When the state of charge of a selected unit is greater than a target state of charge, energy is transferred from the selected unit to the string of storage units, such that the state of charge of the selected unit converges toward the target state of charge. Conversely, when the state of charge of a selected unit is less than a target state of charge, energy is transferred from the string of storage units to the selected unit, such that the state of charge of the selected unit converges toward the target state of charge.